carriers. Internet service providers and other service providers.""" Exhibit 4, confidential page 2. shows the known fiber routes for 45 known entities with competitive fiber facilities in the Minneapolis-St. Paul MSA. These fiber facilities can be used by Qwest's competitors to provide services that directly compete with a number of Qwest mass market and enterprise services. such as local exchange service, private line service, ISDN. local area networks. frame relay service, long distance services, etc. In this case, competitive services can be provided without using the Qwest network.

VI. WIRELESS SERVICE COMPETITION.

39. Wireless phones are now widely accepted by business and residential customers alike for voice telephony. In addition, to bring additional functionality to their services and to attract new customers, wireless providers are now augmenting their services with data applications such as dial-up wireless Internet access, text messaging and image transmission. The customer shift toward wireless substitution in Minnesota can be observed by reviewing the FCC's most recent Local Telephone Competition Report."

The FCC's data shows that total incumbent and CLEC wirelines in Minnesota decreased from 2.935 million as of June 2000 to 2.273 million as of June 2006. In contrast, wireless subscriber counts in Minnesota grew from 1.596 million to 3.542 million

Local Telephone Competition: Status as of June 30, 2006. Industry Analysis and Technology Division. Wireline Competition Bureau. January 2007.

¹¹² Id., Fables 4 and 10. This decrease occurred despite the fact that CLEC lines increased from 230,789 in June 2000 to 675,623 in June 2006.

between June 2000 and June 2006—an increase of 1.946 million, or 122%. The number of wireless subscribers in Minnesota now exceeds the <u>combined</u> number of ILEC and C'LEC uireline access by a wide margin. Clearly, wireless services are outpacing traditional wireline services in fulfilling many Minnesotans' telecommunications needs.

40. In its most recent Commercial Mobile Radio Service ("CMRS") competition report, ¹¹⁴ the FCC procides data regarding the percentage of households that have "cut the cord" (i.e., have disconnected wireline telephone service and now rely exclusively on wireless service for their voice telecommunications needs). The FCC states:

Wireless substitution has grown significantly in recent years. According to a 2005 National Health Interview Survey (* IS), 7.8 percent of adults lived in households with only wireless phones in the second half of 2005, up from 5.5 percent in the first half of 2004 and 3.5 percent in the first half of 2003."

The FCC's data clearly show a significant increase in the proportion of wireless subscribers who have "cut the cord." and there is no sign that this trend is abating, but rather. it is continuing its inexorable upward pace—driven by the omnipresence, increasing functionality and affordable prices of wireless telephones. In fact. the National Center for Health Statistics—the research source for the data relied upon by the FCC to assess wireless substitution—recently released an updated report showing that the proportion of households that have "cut the cord has increased to 9.6% as of June 2006,

¹¹³ **id..** [able 14]

Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, Tenth Report, September 29, 2006.

¹¹⁵ id.Page 89. ¶205

continuing the steady upward trend observed since 2003.¹¹⁶ However, this data tells only part of the story. In many instances, subscribers remove a second landline in favor of wireless service and/or shift a significant amount of telephone usage to wireless service. In each of these instances, demand for Qwest wireline telephone service is reduced, even though the customers have not yet disconnected their wireline telephone service entirely. The FCC states:

Even when not "cutting the cord" completely, consumers appear increasingly to choose wireless service over traditional wireline service. particularly for certain uses. For example, according to one analyst, customers in nearly a third of American households make at least half their long distance calls at home from their cell phones rather than from their landlines. In the early 2006 survey of cellphone users described above, an additional 42 percent of cellphone users said that they also had a landline phone, but that they used their cellphones "most." 117

This data provides undeniable evidence showing that wireless service subscribers are using wireless service as a direct substitute for traditional wireline telephone services

41. Other independent experts that have studied the phenomenon of wireless substitution echo the FCC's conclusions. For example, the Yankee Group reports that "51% of local calls and 68% of long distance calls have been replaced by wireless." In October 2006, Telephia released results of its primary research conducted during Second Quarter 2006 showing the rate of wireless substitution in large metropolitan areas in the United States. including the Minneapolis-St. Paul metropolitan area. Telephia found that

¹¹⁶ http://www.cdc.gov/nchs/products/pubs/pubd/hestats/wireless2006/wireless2006.htm. See Exhibit 5, Page 1

¹¹⁷ Id., Page 90, ¶206.

^{118 2006} U.S. Technologically Advanced Family Survey. The Yankee Group, September 2006.

15.2% of the survey respondents in the Minneapolis-St. Paul area reported that they had cut the cord—a percentage that translates to over 148.000 Minneapolis-St. Paul area households.''' In short, there is <u>no</u> evidence that the rate of substitution of wireless service for traditional wireline service is diminishing. Rather, all evidence demonstrates that such substitution will continue to increase at a robust rate.

42. Competitive wireless service is now available to the vast majority of customers in Qwest's Minneapolis-St. Paul MSA service territory from at least one (and usually several) of the major wireless carriers, including Sprint PCS, T-Mobile, Verizon, and AT&T (f/k/a Cingular). Exhibit 5. page 7. displays the wireless coverage areas for the carriers serving the Minneapolis-St. Paul MSA, based on a conservative mapping of a five mile" coverage footprint around each known cellular tower." Wireless services now provide functionality nearly identical to wireline service from the perspective that both provide switched voice communication capability, access to directory assistance, access to popular calling features (such as call waiting, three-way calling, caller l.D., voice messaging. etc.), access to operator services, number portability (e.g., customers

http://www.telephia.com/html/documents/TotalCommunications_000.pdf, October 18, 2006. See Exhibit 5, Page 4.

 $^{^{120}}$ Other smaller wireless carriers, such as Alltel, also serve the Minneapolis-St. Paul MSA (see http://www.alltel.com/personal/wireless/plans/coverage_maps/MIN.git.). See Exhibit 5. Page 6.

Depending on local conditions, cellular reception is viable at distances as great as **30** miles from the cellular tower (source: http://er.wikipedia.org/wiki/Cell_site.) Mapping based on 2006 data obtained by research firm GeoResults. See Exhibit **5**. Page **7**.

Braham is the only wire center that appears in be beyond the 5-mile radius any of the major carriers' towers; however, coverage information provided by these wireless carriers on their websites indicates that most, if not all, of them do provide services in the Braham community.

may now port a wireline telephone number to a wireless carrier and vice versa) and access to E911 service.

43. Wireless broadband ("WiFi") service represents another form of radio-based competition that is being actively deployed in many communities within Qwest's Minneapolis-St. Paul MSA service territory. 123 According to JiWire, which maintains a comprehensive directory of Wi-Fi hotspots, WiFi service is now publicly available in well over 100 locations within the Minneapolis-St. Paul MSA. including locations in Anoka, Blaine. Bloomington. Burnsville, Cambridge, Coon Rapids, Crystal, Eagan. Eden Prairie. Elk River, Excelsior. Golden Valley, Hopkins, Maplewood, Minneapolis, Navarre. North Branch. Plymouth. Shakopee. St. Paul, Stillwater, Wayzata and White Hear Lake. 124 In any of these locations, users can utilize a WiFi connection to access the internet and use VoIP services to make and receive telephone calls without reliance on Qwest's local network. In other words, WiFi services represent yet another physical "communications pipe" into homes and businesses in the Minneapolis-St. Paul MSA. This technology continues to be aggressively deployed. For example, in September 2006, the Minneapolis City Council awarded a 10-year contract to Minnesota-based US Internet to build a Wi-Fi network that will "blanket" Minneapolis, 125 The system will provide service for residents at a \$20-per-month fee cap for individuals and a \$30-permonth fee cap for businesses. According to the program manager for this wireless

WiFi is a precursor to WiMAX service, which will have a much greater coverage area around each transmitter

http://www.wififreespot.com/minn.html. See Exhibit 5, Page 8.

¹²⁵ http://www.mndaily.com/articles/2006/09/06/68815. See Exhibit 5, Page 35.

initiative. US Internet's service "makes a viable alternative to high-speed cable or DSL service for some computer users." as it is "bi-directional, it is less cost and it is mobile." 126

44. The Minneapolis-St. Paul area is home to many wireless innovators. For example. ADC, with its world headquarters and one of its four primary U.S. operations facilities located in Minneapolis, now offers its network infrastructure products and services to telecommunications service providers, wireless operators, broadcast operators and Fortune 500 enterprises throughout the world." In October 2006, ADC announced that it would be featuring two new WiMAX products at the WiMAX World USA Conference & Exhibition: The Digivance WMX 3000 Base Station and the Digivance WMX 300 subscriber unit. According to ADC, the Digivance WMX 3000 base station "is a stackable, carrier-class platform from which wireless operators can launch premium voice, multimedia and data services." while the Digivance WMX 300 Subscriber Unit "offers a broad range of functions required by medium-to-large businesses and enterprises while supporting high-speed service to hundreds of simultaneously connected users." Further. ADC states that:

With its superior price/performance characteristics, WiMAX is gaining momentum as an alternative technology for wireless broadband access. 4s carriers look for ways to offer mobile and fixed voice, video and data over the same infrastructure, our Digivance WMX product portfolio

http://www.minnesota.publicradio.org/display/web/2006/09/05/mpls_wifi/. See Exhibit 5. Page 37.

^{127 &}lt;u>http://www.adc.com/aboutade/companyoverview/.</u> See Exhibit 5, Page 39.

http://www.adc.com/investorrelations/newsandcommunications/newsreleases/show.jsp?RELEASEID= 213906 See Exhibit 5, Page 41.

provides powerful solutions that can help them implement their convergence strategies efficiently and economically. 129

These two new offerings from ADC are designed to provide an alternative broadband access solution for carriers and enterprise business customers that will serve as a facilities-based substitute for Qwest business telecom services.

45. Qwest docs not maintain that wireless service is viewed by every customer in the Minneapolis-St. Paul MSA as a complete substitute for traditional wireline service. A certain number of customers will never switch from wireline service to wireless service no matter how attractive wireless service becomes. However, it is clear that when current facts regarding functionality (for voice as well as data/internet applications). price and convenience are examined, wireless service now represents a viable and direct substitute for Qwest's wireline services for many Minnesotans. It is equally clear that wireless substitution is occurring today, and that the rate of such substitution will continue to increase. Wireless competition continues to grow in intensity and now represents significant price constraining competition in the Minnesota telecom market.

VII. VOIP COMPETITION.

46. VoIP service, which is typically offered as a package that includes unlimited local and long distance service plus an array of calling features, is now readily available from a broad range of providers to any residence or business customer in the Minneapolis-St.

¹²⁹ *Id.*

Paul MSA that has broadband internet access.¹³⁰ As a preliminary matter, some parties contend that VoIP service is significantly more expensive than traditional landline service because a broadband connection is required. However, this precept incorrectly implies that a customer purchases broadband service solely to facilitate VoIP. In fact, most customers purchase broadband services primarily for internet access and entertainment purposes, not simply to facilitate VoIP. For these customers, there is no incremental cost for broadband when they elect to add VoIP telephone service via the preexisting broadband internet connection, and the cost of broadband is therefore not a factor in their VoIP purchase decision.

47. According to the FCC. broadband access lines in Minnesota have grown from 62.983 in June 2000 to 1.057.576 in June 2006—an increase of almost 1.580%. In fact, in the first six months of 2006 alone, broadband access lines in Minnesota increased by more than 23%. As of June 2006, approximately 49% of the broadband access lines in Minnesota were served by cable modem. The FCC found that "more than 99% of the country's population lives in the 99% of zip codes where a provider reports having at least one high-speed service subscriber." and that 98% of the zip codes in Minnesota

 $^{^{130}}$ Broadband internet access is now available from a number of sources, including cable modem service, digital subscriber line, wireless broadband and satellite.

High Speed Services for Internet Access: Status as of June 30, 2006, Industry Analysis and Technology Division. Wireline Competition Bureau. January 2007. Table 10.

¹³² id.

¹³³ *Id.*, Page **4.**

have at least one broadband service provider available as of June 2006.¹³⁴ Competitive broadband services are now widely available from multiple providers in the Minneapolis-St. Paul **MSA.** and have been embraced by a rapidly increasing number of customers. Each broadband customer represents a potential VolP subscriber.

48. Currently, there are at least 60 VolP providers serving the Minneapolis-St. Paul MSA. including Verizon, AT&T, Vonage, BroadVoice, JoiPhone, Packet8, SunRocket, VelocityTel, SageVone, ViaTalk and many others. Some of these providers, such as Vonage. Packet8, and SageVone offer service options for both the residential and business markets, while others, such as NetZeroVoice and SunRocket, focus primarily on the residential market. Vonage, which is probably the most recognized independent residential VolP provider, recently announced that in just over two years its customer base has rapidly grown to over 2 million subscribers in the U.S. Since VolP calls don't rely on Qwest's switched network and calls transported via non-Qwest broadband facilities don't rely on Qwest's local loop network, the rapid customer VolP adoption rate represents an increasingly significant form of network bypass competition.

135

¹³⁴ *Id.*, Table 17.

http://www.voipreview.org/scrvice.all2.aspx?provider=0&Country=0&Area_Code=612&scrviceType=1&sort_exp=ProviderName%20asc. See Exhibit 6, Page 1

http://pr.vonage.com/releasedetail.cfm?ReleaseID=209928. See Exhibit 6, Page 16.

49. Cross Telecom is a Bloomington, Minnesota-based VoIP provider that focuses solely on the business market.'" Cross provides "a complete portfolio of voice, data, IP telephony. wireless, security and professional services solutions" and offers a "complete end-to-end integration of converged technologies." Cross offers its VoIP solutions to small, medium-sized and enterprise businesses. In marketing itself to potential enterprise business customers. Cross states:

In today's demanding economy, enterprise businesses are under constant pressure to perform at their highest production and service levels in order to stay ahead of the competition . . . Key to that never-ending struggle is leveraging the right communications technology. The answer is convergence – IP Telephony has truly redefined how you do business successfully in today's markets . . . As an industry leader in the field of IP Telephony, Cross has both the experienced resources and knowledgeable experts on board to deliver innovative advanced technology for enterprise businesses. Serving top Fortune 500 companies nationwide, Cross understands what it takes to deliver the superior communications you need to move your business forward. 140

50. SimpleSignal is a full-service business VoIP provider¹⁴¹ with services available in the Minneapolis-St. Paul MSA. Simple Signal describes itself as follows:

SimpleSignal is a facilities-based complete network provider of business VoIP. The company's enterprise-grade service is designed specifically for small to medium sized businesses with four to 100 phones, combining voice and data. hosted PBX, long distance and conferencing into one powerful. cost effective communications solution. SimpleSignal delivers more capabilities than on-premise PBX systems, with greater flexibility, simplicity, and personalized service. Now a business of any size can

^{137 &}lt;u>http://www.crosstelecom.com/aboutUs/Index.asp.</u> See Exhibit 6, Page 17.

¹³⁸ *Id.*

http://www.crosstelecom.com/voiceSolutions/index.asp. See Exhibit 6. Page 18.

http://www.crosstelecom.com/voiceSolutions/enterpriseSolutions.asp. See Exhibit 6, Page 19

http://www.simplesignal.com/. See Exhibit 6, Page 20.

leverage the power of advanced IP communications technology, improving business productivity, while significantly reducing overall telecom costs. ¹⁴²

51. Access Point, Inc., another provider of business VoIP service in the Minneapolis-St. Paul MSA, describes VoIP as "the next level in business communications." Access Point describes the advantages of VoIP:

VoIP can answer challenges for businesses of all sizes. It offers a wealth of features. ease of use, and scalability that other solutions can't touch. Best of all, you can make the switch with a nominal entry cost and a compelling ROI. 144

According to Access Point. its VoicePoint family of VoIP products offers "a VoIP solution that allows you to replace your traditional phone service, but keep your existing telephone equipment and system." 145

Cross Telecom. SimpleSignal and Access Point are just three examples of the many VoIP providers that are aggressively competing with Qwest for small and large business customers in the Minneapolis-St. Paul MSA.

52. While VoIP providers such as Vonage are currently reporting impressive subscriber totals, industry experts forecast exponential VoIP growth in the future. For example. Frost and Sullivan found that VoIP market revenue totaled \$295.1 million in 2004, and they expect revenues to reach \$4.1 *billion* in 2010—a growth rate of over

http://www.simplesignal.com/press-releases.html. See Exhibit 6, Page 21.

http://www.accesspointinc.com/voicepoint.htm. See Exhibit 6. Page 28.

^{144 &}lt;sub>Id.</sub>

http://www.accesspointinc.com/voicepoint_service.htm. See Exhibit 6, Page 29.

1.200%. As noted earlier, the broadband connections that enable VoIP service have increased significantly to date, and that growth is expected to continue. The Yankee Group found that roughly 44% of all U. S. households now subscribe to broadband internet access service, and that proportion is expected to increase to over 58% by 2010. 147

With respect to VoIP in the business markets, Infonetics Research, a major research firm specializing in data networking and telecommunications issues, released a study in May 2006 that found:

- 36% of large. 23% of medium and 14% of small North American organizations interviewed were already using VoIP products and services in 2005.
- Almost half of small and two-thirds of large organizations in North America will he using VoIP products and services by 2010.¹⁴⁸

Thus, leading industry analysts predict seismic changes in the structure of the competitive mass market and enterprise telecom markets in the U.S., with a significant shift away from traditional wireline telephone services and toward intermodal services such as VoIP.

53. In the past, a lack of reliable access to 911 emergency service providers was often mentioned as a reason not to consider VoIP services as a viable direct substitute for traditional wireline service. However, this issue has been largely resolved with regard to

Real World Network, Frend and Forecasts, North American Residential VoIP Market to Increase Growth. July 19. 2005. See Exhibit 6, Page 30.

¹⁴⁷ 2006 U.S. Consumer Fixed Line Forecast, The Yankee Group. January, 2007

http://www.infonetics.com/resources/upna06.ipv.nr.shtml. See Exhibit 6, Page 32.

VolP customers at fixed locations. The primary remaining VoIP E911 issue currently being addressed by the industry is the problem of "nomadic" E911, involving instances where customers transport their VolP phone equipment to a location other than the location at which the equipment is registered and attempt to place an E911 call from the remote location.¹⁴⁹ Unless the VoIP provider is notified that the customer has changed locations. the E911 call will show the name and address of the location at which the VoIP equipment was originally registered. For example, if customer John Smith registers his VoIP equipment at 123 Main Street in Minneapolis, hut subsequently takes his VoIP equipment with him on a business trip to Chicago where he places an E911 call without notifying his VoIP service provider of the new location, the E911 operator will recognize his call as originating at 123 Main Street in Minneapolis. However, if the customer is not "nomadic" and simply uses his or her VoIP equipment at a fixed location as a landline phone replacement (and has properly notified the VoIP provider of the address of the fixed location). 911 calls from that fixed location are recognized by the E911 operator as originating from the location at which the VoIP service was initially registered

In an article in USA Today, AT&T discussed a solution it has devised to address the problem of nomadic VolP:

AT&T's nomadic solution, called Heartbeat, uses its internet network to track the location of users. Here's how it works: when VoIP customers power down, AT&T's network will automatically suspend VoIP service. Once the phone adapter is plugged back in. AT&T will ask the user to verify his or her location. For customers who indicate they haven't

The FCC ordered all VolP providers to make their VolP services fully 91 I-capable by November 28. 2005. particularly in instances where the customer is 'nomadic."

moved. service will be instantly restored. If they have moved, they'll be directed to an 800 number or web page to register the new location."

Again. so long as the VoIP subscriber properly registers his or her location with the VoIP provider. the E911 operator will automatically receive the 911 caller's name, telephone number and street address. VoIP providers are actively working to resolve the remaining E911 issues driven by nomadic VoIP applications. To the extent the VoIP service is used by the VoIP subscriber to replace wireline service at a static address, VoIP must clearly be viewed as a direct substitute for traditional wireline service.

VIII. WHOLESALE COMPETITION

54. Earlier in this declaration, we briefly mentioned that wholesale services are now offered by several carriers as an alternative to Qwest's wholesale services. In fact, many carriers (including several CLECs discussed earlier) now offer dark fiber, wholesale access, wholesale transport and finished telecommunications services to other telecom providers in the Minneapolis-St. Paul MSA. For example. AT&T, Covad, Eschelon, Global Crossing, Granite Telecommunications, Integra, Level 3, McLeodUSA, Time Warner Telecom. Trinsic, Verizon and XO Communications have all self-reported to the FCC that they are offering "carrier's carrier" services to other telecommunications service providers. Since inter-carrier services are typically provided on a contractual basis, details of such services are difficult to obtain. However, the presence of numerous

¹⁵⁰ ΛΤ&T Solves VoIP's 911 Issue, USA Today, October 12, 2005. See Exhibit 6. Page 33

Felecommunications Provider Locator, Industry Analysis & Technology Division, Wireline Competition Bureau, Table 3, March 2006.

carriers actively marketing wholesale services in the Minneapolis-St. Paul MSA demonstrates that Qwest's competitors have a clear alternative to purchasing UNEs from Qwest. A brief discussion of the wholesale offerings of a sample of these carriers follows.

55. Comcast offers wholesale services to other carriers in the Minneapolis-St. Paul MSA over its extensive coaxial and fiber network. On its website, Comcast touts the carrier benefits of its network. describing its wholesale offering as a "cost effective transport that can reach into new markets and scale at a moment's notice." Further, in addressing the advantages to other carriers of utilizing its network. Comcast states:

Comcast's services can be deployed quickly and efficiently with minimal wait and bureaucracy than you are typically confronted with when purchasing services from traditional telephone carriers.¹⁵³

While Comcast's pricing for such loop and transport wholesale services is a proprietary matter of carrier-to-carrier contracts and is not publicly posted, it is clear that Comcast positions its wholesale services as a direct alternative to wholesale network elements available from incumbent telephone service providers such as Qwest.

56. AT&T also utilizes its fiber network to offer wholesale services to other carriers in the Minneapolis-St. Paul MSA. AT&T states:

Years of experience serving wholesale customers, targeted investment in our network and technology innovation have positioned AT&T as an

^{152 &}lt;a href="http://www.comcastcommercial.com/index.php?option=content&task=view&id=33&Itemid=71">http://www.comcastcommercial.com/index.php?option=content&task=view&id=33&Itemid=71. See Exhibit 7, Page 1.

^{153 &}lt;sub>Id</sub>.

industry leader. With AT&T Wholesale's dedicated sales, customer care and global operations teams at your side, you will have the networking expertise to support a full range of voice, video. data and IP services - for you and your customers. 154

On November 13. 2006. AT&T announced that it had been awarded "best national U.S. wholesale provider" by Capacity Magazine as part of that publication's second annual Global Wholesale Awards." AT&T, which has over miles of fiber in the Minneapolis-St. Paul MSA. 156 currently offers a full range of wholesale services to other carriers. including local and long distance voice services, data services, internet protocol services. applications services and international services. 157

57. Covad operates as a facilities-based, integrated telecommunications service provider with infrastructure located in 2,050 central offices in 235 MSAs across the country, including the Minneapolis-St. Paul MSA. Covad provides a wide range of retail and wholesale services including business and consumer DSL, Frame Relay, T-1 and VoIP services (with other services, such as Bonded T-1 and wireless to be introduced in 2007). In its Third Quarter 2006 presentation to investors, Covad reported that it provides wholesale DSL and Line Powered Voice Access (a VoIP service that requires

http://www.business.att.com/?segment=whole See Exhibit 7. Page 2.

http://www.sbc.com/gen/press-room?pid=5097&cdvn=news&newsarticleid=23110. See Exhibit 7, Page 3.

¹⁵⁶ GeoTel fiber route data. October 2006.

http://www.business.att.com/services.jsp?repoid=ProductCategory&segment=whole. See Exhibit 7. Page 4.

¹⁵⁸ Covad Communications Group, Inc.: 'Third Quarter 2006 Investor Presentation, pages 3 and 5. See Exhibit 7, Page 5.

¹⁵⁹ *id.*.Page **6.**

no special broadband equipment at the customer's location) to carriers serving the consumer and small, "single owner" business markets. In addition, Covad reported that it provides Voice Optimized Access ("VOA"), xDSL, T-1 and Frame Access to carriers serving medium and large enterprise husiness customers. Regarding its wholesale products. Covad reports that its "unique set of assets will continue to attract strategic partners," including carriers such as Earthlink, AT&T, United Online, XO, Nextlink, Verizon. Sprint. etc. On a consolidated basis (wholesale and retail operations combined), Covad announced 2006 total revenues of \$474 million with wholesale service revenues of \$275 million. Thus, wholesale revenues represent well over half of Covad's annual revenue stream for the year. Clearly, Covad's strong wholesale facilities-based focus is contributing significantly to its growth nationally and within the Minneapolis-St. Paul MSA.

58. XO offers wholesale services through its XO Communications Carrier Services division. and asserts that it provides wholesale telecom services to CLECs, Interexchange Carriers, Cable TV providers, wireless service providers and VoIP service providers. ¹⁶³ Its wholesale product portfolio includes wholesale local voice service, long distance service. IP aggregation. dedicated internet access. private line service, DS-1 aggregation,

¹⁶⁰ *Id.*. Page 6.

¹⁶¹ *Id.*. Page 7.

¹⁶² Covad Communications Group, Inc.: Fourth Quarter 2006 Earnings Supplement, pages 3 and 6. See Exhibit 7, Page 17.

¹⁶³ http://www.xo.com/products/carrier/. See Exhibit 7.Page 31

Ethernet services. VoIP services and collocation. 164 XO was one of the first wholesale carriers to deploy a finished wholesale service ("Wholesale Local Voice" service) designed to replace UNE-Platform service. In a 2006 press release, XO states:

Launched in August 2005. XO's wholesale offering for CLECs serving the residential and small business markets has rapidly gained momentum as a viable alternative to the unbundled network element platform (UNE-P) provided by incumbent carriers that were eliminated on March 11, 2006. The XO service delivers all the advantages of the UNE-P platform, and enables CLECs to avoid less economical choices such as building their own network facilities, or paying premium prices through commercial agreements or Special Access services from incumbent local exchange carriers.'**

In addition, it is important to note that XO's wholesale business is not limited to services provided via landline facilities. As discussed earlier in this declaration, XO's broadband wireless subsidiary. Nextlink: also provides wholesale telecommunications services. Nextlink offers wireless backhaul, as well as network redundancy and diversity services to mobile wireless providers and wireline carriers through fixed wireless broadband technology and over XO's licensed spectrum, which covers 75 metropolitan markets, 166 including Minneapolis-St. Paul.'' Nextlink's wholesale broadband wireless services can be offered in any Qwest wire center in the Minneapolis-St. Paul MSA that is within reach of a Nextlink broadband wireless transmitter/receiver, since such wireless services are not constrained by physical wire center boundaries.

164 *Id*.

http://www.xo.com/news/292.html. See Exhibit 7, Page 32.

¹⁶⁶ Current Analysis, Company Assessment of XO Communications, July 2006

http://www.nextlink.com/spectrum_map.htm. See Exhibit 7, Page 34.

59. Minneapolis-based Onvoy is a facilities-based provider of business retail and wholesale telecom services that owns and maintains an extensive network in and around the Minneapolis-St. Paul MSA. According to GeoTel, this network includes approximately route miles of fiber within the MSA. Onvoy encourages other carriers to "think outside the RBOCs 170" by offering them a full array of data, voice, operator services. broadband Internet access and wireless services. Onvoy's suite of wholesale IP services includes "Broadband Voice products for business and residential markets, IPTV to help cable operators compete, and Dedicated Internet to transfer data at lightning speed."" On its website Onvoy further promotes its wholesale Broadband Voice service by stating:

Onvoy. a proven leader in IP technology, has created Broadband Voice to enable you to take advantage of our experience by offering VoIP service to your customers. Broadband Voice is a feature-rich, turnkey solution that includes all essential services such as CALEA and 911, and is compliant with all state and federal telecom regulations. Focused on the residential customer, Broadband Voice gives you increased speed to market by leveraging Onvoy's ongoing investment in technology, innovation and continuous improvements. Broadband Voice allows you flexibility in packaging. and customization for your customers. ¹⁷²

Clearly. Onvoy is well positioned to provide competitive wholesale services in the Minneapolis-St. Paul MSA

¹⁶⁸ http://www.onvoy.com/pdf/networkmap. See Exhibit 7, Page 35.

¹⁶⁹ GeoTel fiber route data, October 2006.

http://www.onvov.com/sol_who.shtml. See Exhibit 7. Page 37.

http://www.onvoy.com/sol_who_ips.shtml. See Exhibit 7, Page 38.

http://www.onvov.com/sol_who_ips_bipv.shtml. See Exhibit 7, Page 39.

60. As described earlier in this declaration, prior to its acquisition of Broadwing, Level 3 focused almost exclusively on the wholesale market. While the October 2006 acquisition of Broadwing expanded Level 3's presence in the retail market, it also increased the scope of Level 3's wholesale telecom service operations. Level 3 notes that "approximately half of Broadwing's revenue comes from the wholesale market, with business customers comprising the remaining revenue." 173 Level 3 identifies its primary targeted customers as "RBOCs, major IXCs, major foreign PTTs, major ISPs and Portals, Media Companies: wireless companies, satellite companies, established CLECs, system integrators, government, academia and content providers." 174 Level 3 states that it offers five major categories of wholesale services: voice services, Softswitch, internet and data services, transport services and infrastructure services (which include collocation and As described earlier in this declaration, the combined dark fiber services)." Broadwing/Level 3 entity owns significant facilities in the Minneapolis-St. Paul MSA, fiber miles in areas served by Qwest. These facilities can be used to provide wholesale services to customers in direct competition with Qwest's wholesale UNE services.

61. Global Crossing provides both retail and wholesale services in the Minneapolis-St. Paul MSA. Global Crossing's network map shows Minneapolis to be among the

 $[\]frac{173}{\text{http://www.level3.com/newsroom/pressreleases/2006/20061017.html}}. \ \ \text{See Exhibit 7. Page 41}$

http://www.level3.com/580/html. See Exhibit 7. Page 43.

^{175 &}lt;sub>Id.</sub>

many U.S. cities with "on net" access to its worldwide fiber network, ¹⁷⁶ and according to GeoTel, Global Crossing has over route miles of fiber within the Minneapolis-St. Paul MSA, ¹⁷⁷ Boasting a "backbone [that] can support anything." Global Crossing offers voice services, data services, capacity services, converged IP services, access services and collaboration services to other carriers. ¹⁷⁸ As Global Crossing explains:

Our customers include more than 35 percent of the Fortune 500, as well as 700 carriers, mobile operators and ISPs. Global Crossing provides them – and can provide you – a fully integrated and interoperable suite of IP and legacy services including IP VPN Service, VoIP Service and IP Video. And all of this is over our highly secure IP network, which is managed and operated end-to-end. It is a network that will not be replicated in the near future. if ever."

In November 2006. Global Crossing announced that it had received Capacity Magazine's highest distinction, "Best Global Wholesale Provider," for the second consecutive year, based on its "outstanding achievements in customer service, network availability and product offerings." ¹⁸⁰

62. Time Warner Telecom provides both retail and wholesale services in the Minneapolis-St. Paul MSA. Time Warner Telecom's Minneapolis-St. Paul network is part of the national Time Warner Telecom network, which delivers communications services over "more than 24.000 miles of fiber networks, to businesses in 30 states and 75

http://www.globalcrossing.com/html/map05_11_05.html. See Exhibit 7, Page 48.

GeoTel fiber route data, October 2006.

http://www.globalcrossing.com/carrier/carrier_landing.aspx. See Exhibit 7. Page 49.

¹⁷⁹ http://www.globalcrossing.com/company/company_landing.aspx. See Exhibit 7, Page 50

http://www.globalcrossing.com/news/2006/november/14_2.aspx. See Exhibit 7, Page 51.

U.S. markets.¹⁸¹ Time Warner Telecom provides a range of wholesale services as a "carrier's carrier." including voice services, internet and data services, switched and transport services and collocation.¹⁸² On June 1. 2005, Time Warner Telecom announced an agreement with the merged AT&T/SBC to provide, through 2010, "Special access and other last mile network services to the companies nationwide", ¹⁸³ Thus, AT&T can obtain Special Access services from a provider other than Qwest as it seeks to further expand its business presence in markets such as Minneapolis and St.Paul.

IX. SYSTEMS INTEGRATORS.

63. With the increasing complexity of communications systems, large businesses are increasingly turning to "systems integrators" to assess, plan and manage their telecommunications systems. Systems Integrators provide a "single point of contact" for the design and management of complex telecommunications systems that minimizes the need for businesses to perform these functions in-house. The demand for systems integrators is driven by the fact that extensive planning and management is required to create converged communications systems—blending voice, data, video, internet and wireless applications—without having to create new physical networks from scratch. Systems integrators have shown that they can compete successfully against traditional

http://twtelecom.com/about_us/networks/html. See Exhibit 7, Page 53.

http://www.twtelecom.com/cust_solutions/application.html. See Exhibit 7, Page 55.

Time Warner Telecom press release: *Time Warner Telecom, AT&T, SBC Extend Long-Term Service Agreement,* June 1, 2005. See Exhibit 7, Page 57.

¹⁸⁴ Systems Integrators are also known as Managed Telecom Service Providers.

telecommunications providers such as Qwest. ¹⁸⁵ In the enterprise business market, nearly half of all medium and large enterprises utilize some form of managed telecom and IT services. ¹⁸⁶

64. Systems integrators such as Electronic Data Systems, Data Systems Corp, IBM, Accenture, Northrop Grumman, New Edge Networks and Spanlink Communications are now providing "single point of contact" telecommunications services to business customers. For example, New Edge provides managed telecom services to "telecom carriers. small to midsize businesses and large corporations" fn many U.S. markets, including Minneapolis-St. Paul. IBM also provides systems integration services through its IBM Converged Communications Services division. According to its promotional materials. "IBM can help you design deploy and manage an IP telephony infrastructure that can help reduce the costs associated with managing and maintaining separate voice and data equipment and networks. and increase the productivity of your employees." Spanlink Communications, with headquarters in Minneapolis, is a provider of "customer interaction solutions that leverage VoIP technology." Having partnered with Cisco Systems in the early stages of IP telephony, Spanlink now "develops and markets customer interaction products. workforce optimization products and system management

¹⁸⁵ The North American managed telecom service market generated \$18.6 billion in revenues in 2006 and is expected to generate \$29.5 billion in 2012. Source: North American Managed Telecom Services Markets. Study N022-63, Frost and Sullivan. 2006. Page 29.

¹⁸⁶ *Id.*. Page 10.

¹⁸⁷ http://www.newedgenetworks.com/products_. See Exhibit 8. Page 1

http://www-935.ibm.com/services/us-index.wss-offering/en/a1025378. See Exhibit 8. Page 2

http://www.spanlink.com/about/about_main.html. See Exhibit 8. Page 3

products that exploit the benefits of VoIP network infrastructures," resulting in "transformational business improvements in productivity, efficiency and customer satisfaction." A variant of the systems integrators, "Virtual Network Operators (VNOs)," has also appeared in the enterprise business market. Virtela is a "global network solutions company" and "super integrator" that leases network capacity from other providers, while owning network intelligence hardware and software unique to its service portfolio." While acknowledging that it falls into the VNO service provider category. Virtela considers itself to be more of "a hybrid in that it combines the best characteristics of both the VNO and a facilities based carrier, as well as those of an MSSP (Managed Security Services Provider)."" These examples represent just a few of the many competitive alternatives offered by systems integrators serving the medium and large enterprise business marhets.

X. CONCLUSION.

65. The Minneapolis-St. Paul MSA is one of the most robustly competitive markets in Qwest's 14 state region. with numerous intermodal and intramodal carriers now actively competing in the market. Retail customers in every Qwest wire center in the Minneapolis-St. Paul MSA now have the choice of at least one. and often many more, alternatives to Qwest's retail telecommunications services. This collection of

 $[\]frac{-}{190}$ Id.

¹⁹¹ http://www.virtela.net/. See Exhibit 8, Page 5

¹⁹² *Id.*

competitors ranges from traditional wireline CLECs, to cable-based telecom service providers. to wireless (narrowband and broadband) providers to VoIP providers. In addition, multiple wholesale telecom service providers now provide services to other carriers in the Minneapolis-St. Paul MSA, providing these carriers with alternatives to the purchase of Qwest UNEs and other wholesale services. Qwest's service temtory in the Minneapolis-St. Paul MSA is now fully competitive, and it is clear that Qwest cannot exercise market power in view of the scope and composition of competition that now exists in that MSA.